Date: October 23, 2006

State of Hawaii
Department of Land and Natural Resources
Division of State Parks
1151 Punchbowl Street, Room 310
Honolulu, Hawaii 96813

Attention: Mr. Steve Thompson

Subject: Earthquake Emergency Response Visit at Lapakahi State Historical Park
Big Island, Hawaii

Dear Mr. Thompson:

On the afternoon of October 19, 2006, our senior geologist Dr. Yucheng Pan and I from Earth Tech, Inc. (Earth Tech) along with a staff of professionals from State Department of Land and Natural Resources (DLNR), Division of Parks, visited the Lapakahi Historical Park located near Mahukona area on the northern tip of the Island. See Photo No. 1 and 2. The purpose of this site visit was to investigate potential impact of the October 15 earthquake on the various rock structures within the historical park.

The park is located in a pristine costal area and is the site of a 600 year old Hawaiian fishing village. Rock wall structures are generally the relics of the homes of the villagers. See Photo No. 2 and 3. A walk through the area indicated that in general rock walls have received sporadic damage at various locations within the village. Rocks were separated from the wall and were fallen on the nearby ground. See Photo No. 4 through 7. Also evident was the damage to the walls of the typical village homes. See Photo 8 and 9. The damage seemed consistent throughout the area with rocks being dislodged from the wall structures.

The repair of this culturally sensitive structure requires a special type of methodology and approach which is different from conventional construction. It would take a particular master builder carefully chosen from among the Hawaiian community. We anticipate the cost of repair at approximately $140,000 and a period of construction of 3 months.

Prepared by:

Ardalan R. Nikou, PE, RME
Chief Engineer
Earth Tech, Inc.


Photo No. 1- Aerial view of the historical park.

Photo No. 2- Ground view of the historical park.

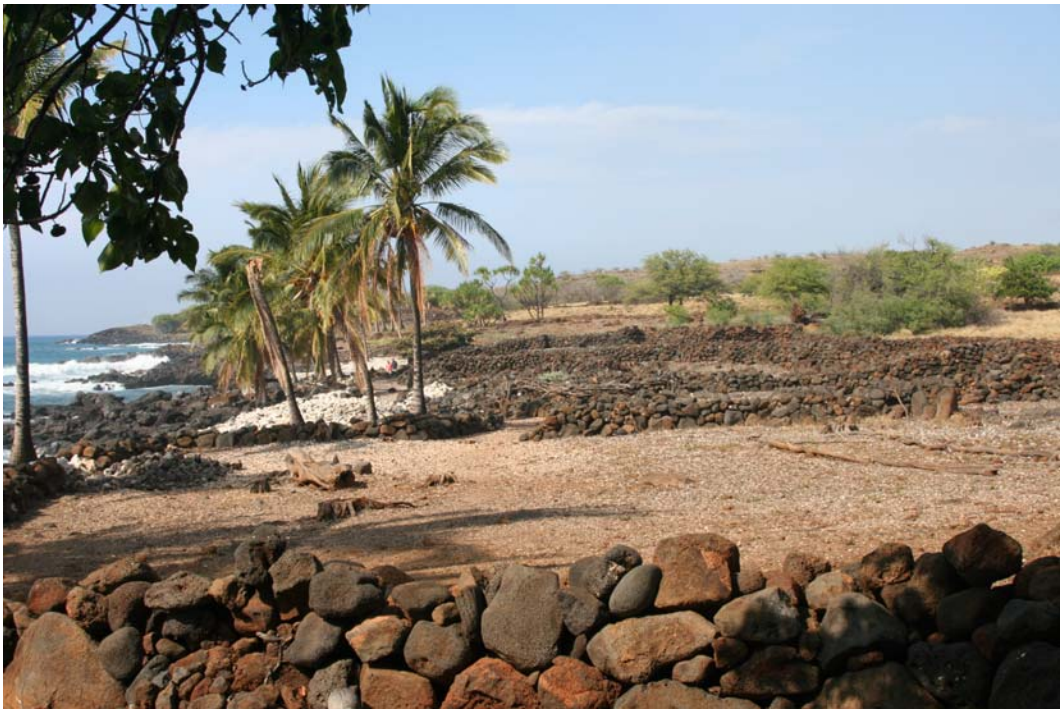

Photo No. 3- Rock walls are the relics of the fishing village.

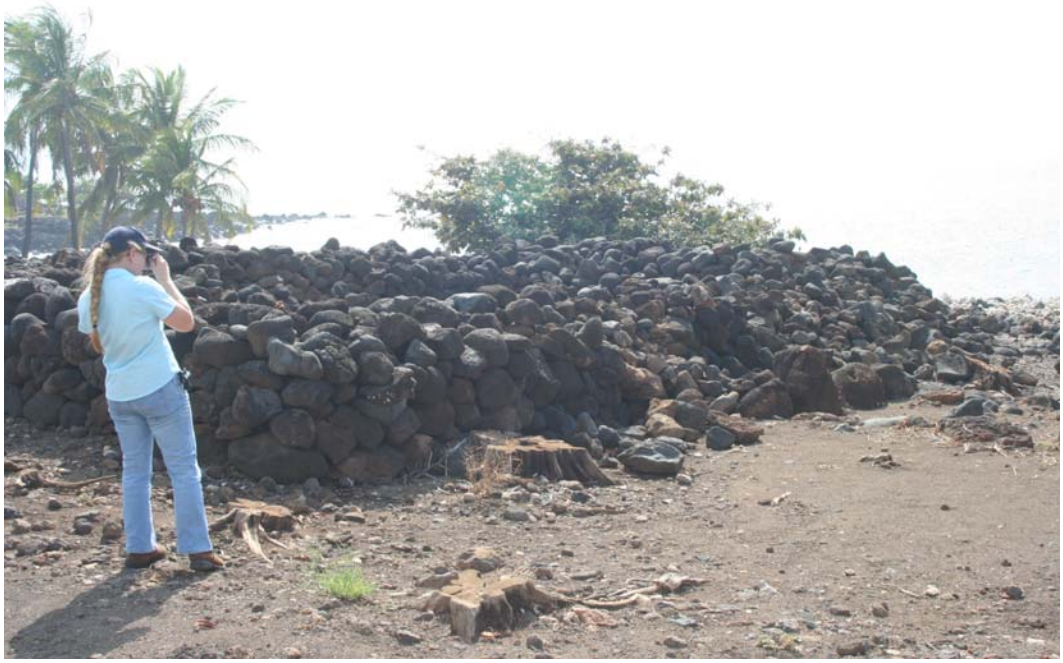

Photo No. 4- Wall failure caused by ground shaking.

Photo No. 5- Mass failure of rock wall structure.

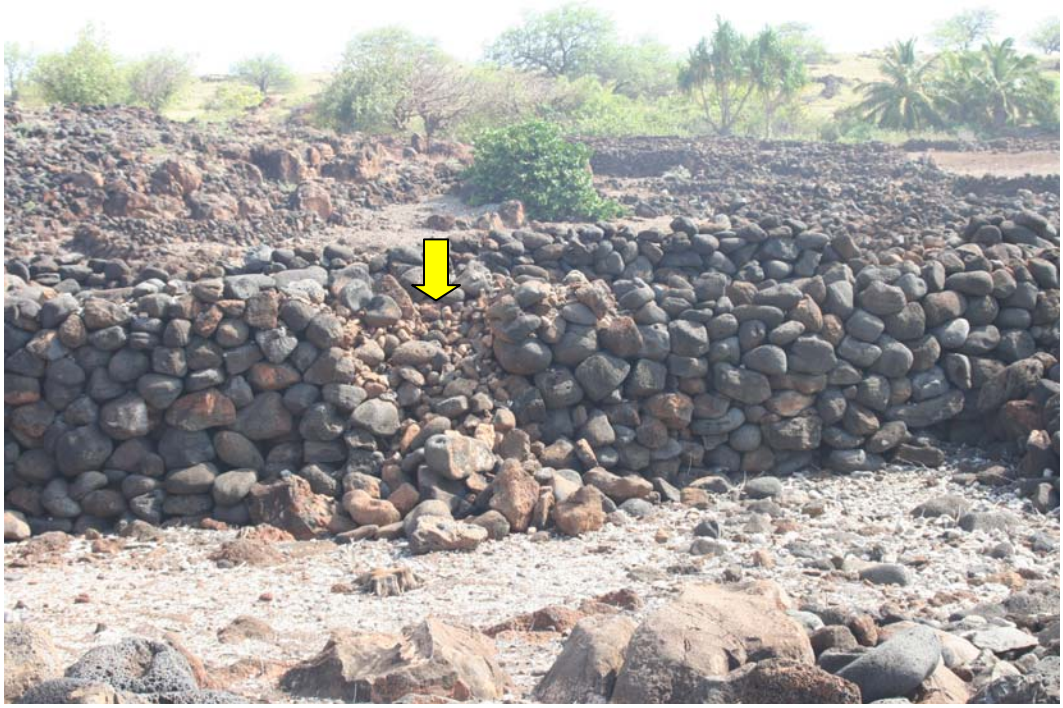

Photo No. 6- Rock wall failure due to earthquake.

Photo No. 7- Fallen rocks caused by shaking of the ground.

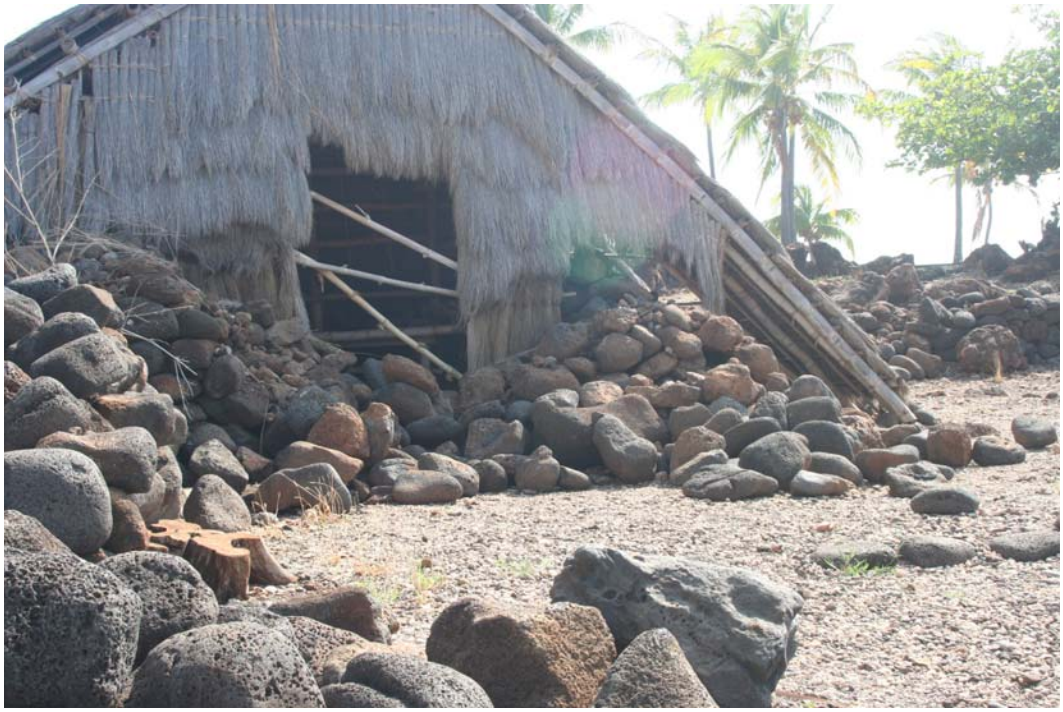

Photo No. 8- Crumbled building walls caused by ground motion.

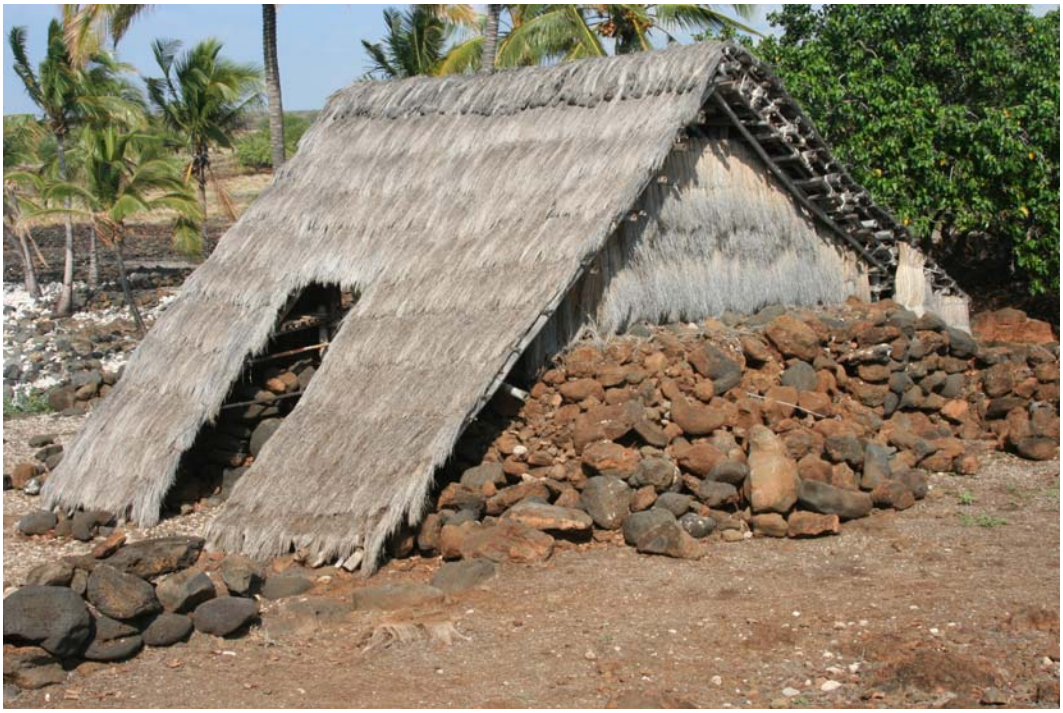

Photo No 9- Wall failure along side of the building.